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I, LEANNE MYNOTT, TEAM LEADER EXAMINATION SUPPORT AND
SALES hereby certify that annexed is a true copy of the Provisional specification
in connection with Application No. PQ 2834 for a patent by BRITAX
RAINSFORDS PTY LTD filed on 15 September 1999.

WITNESS my hand this
Eighteenth day of October 2000

LEANNE MYNOTT
TEAM LEADER EXAMINATION
SUPPORT AND SALES



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BRITAX RAINSFORDS PTY LTD

ORIGINAL

AUSTRALIA

PATENTS ACT 1990

PROVISIONAL SPECIFICATION FOR AN INVENTION ENTITLED:-

"A MIRROR MOUNTING ASSEMBLY FOR CONTROLLING
VIBRATION OF A MIRROR"

This invention is described in the following statement:-

It is an aim of this invention to provide a mirror mounting assembly which prevents undesirable vibration and movement of the mirror that is an improvement on known arrangements.

5 In its broadest form, the invention is a mirror mounting assembly for controlling undesirable vibration and movement of the mirror that comprises:

a mirror support for holding a mirror,

a base portion,

10 said mirror support held to said base portion by a connector that allows pivotally movement of said mirror support with respect to said base portion, and

a link extending between said mirror support and base portion with one end of said link held with respect to either said mirror support or base portion with the other end locating in an aperture, there being a tight sliding fit between said aperture and link so that sufficient force applied to said mirror support will cause movement
15 of said link in said aperture and allow movement of said mirror support with respect to said base and that said link will be held tightly enough in said aperture to prevent vibration or undesirable movement of said mirror support with respect to said base.

Preferably, the mirror will be fixed in a conventional manner to a mirror support.

20 Both the mirror support and base portion are preferably moulded from polymeric materials. However, other materials such as diecast metals may be equally suited.

Preferably the base portion is a separately moulded component which itself is then located in and fixed to the moulded shell of a wing rear vision mirror. Alternatively,
25 the base may be integrally formed with other components such as the moulded shell.

Preferably, the connector allows movement of the mirror support about two orthogonal axes. However, the invention will be equally suited to mono axis mirrors where the mirror support may be adjusted about one axis only such as a vertical axis.

30 The connector may comprises a variety of mounts which allow movement of the mirror support about the adjustment axes. The connector means may include a ball

The amount of force used to hold the link will be a balance between maximising the holding force to prevent unwanted vibration and movement while not exceeding the maximum force available or desired to be used to move the mirror support.

- 5 The required link holding force will also depend on the radial spacing of the link and aperture from the connection means. Generally, the required force applied to the link will decrease as the radius from the connection point increases.

- 10 In most instances, the mirror support is adjusted about a generally horizontal and vertical axis. A link and aperture combination for each axis of movement is used. However, it will be possible to position a single link and aperture arrangement with a dual axis movement mirror to provide the required holding force for both axes of adjustment.

- 15 In order to fully understand the invention, a preferred embodiment will be described, however it should be realised that the scope of the invention is not to be limited or confined to the features of this embodiment.

This embodiment is illustrated in accompanying drawings in which:

- 20 Figure 1 shows an expanded view of a mirror mounting assembly, Figure 2 shows a plan view of the mirror mounting assembly, and Figure 3 shows a cross-sectional view of the mirror mounting assembly about section line B-B shown in Figure 2.

- 25 The mirror mounting assembly 10 comprises a mirror support 11 and a base portion 12. The connection between the mirror support 11 and base portion 12 comprises a yoke 13 and spigot 14. The spigot 14 connects directly to the mirror support 11, and the yoke 13 is pivotally attached to the mirror support 11 and base portion 12 respectively. The yoke 13 prevents rotation of the mirror support 11 with respect to
30 the base portion 12. This connection arrangement allows movement of the mirror support 11 with respect to the base portion 12 about two orthogonal axes.

23 to have sufficient grip on the surfaces of the friction blades to restrain unwanted movement.

5 In this embodiment, a pair of friction blades 17 are used. Each of the friction blades 17 are positioned either side of the spigot 14 which provides an optimum rigidity for the mirror support 11. If the mirror support 11 is rotated about an axis passing through the spigot 14 which is parallel with the part line B-B shown in Figure 2, then both of the friction blades 17 will move either into or out of the apertures 20. If the mirror support 11 is rotated about a second axis parallel to the first, then one friction
10 blade 17 will move into its aperture 20 and the other will move out of its aperture 20. The length of the friction blades 17 are sufficient to cover the full range of movement of the mirror support 11.

The compression spring 25 provides a convenient means for adjusting the gripping
15 force applied to the friction blades 17. The compression spring can be matched to provide the required gripping force which will prevent undesirable movement while at the same time still enabling manual movement of the mirror support 11.

The invention provides a means which is component and easy to manufacture while
20 not requiring close tolerances to ensure proper function of the mounting assembly 10.

Dated this 15th day of September, 1999.

25 BRITAX RAINSFORDS PTY LTD
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W. J. M. M.

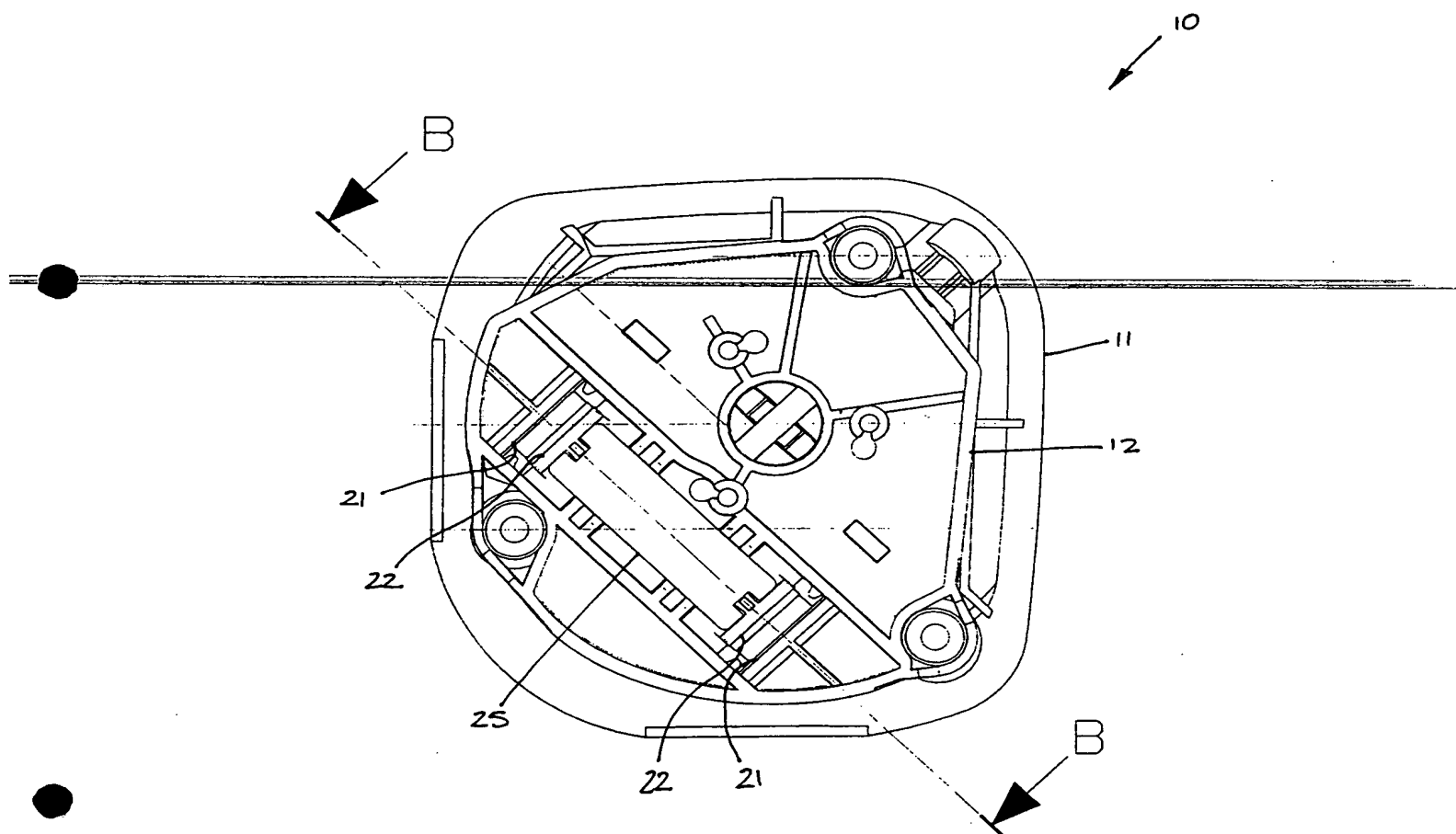


Fig 2

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WE CERTIFY THAT THIS AND THE FOLLOWING
..... PAGES ARE A TRUE AND CORRECT
COPY OF THE ORIGINAL SPECIFICATION.

C. V. M. all
Patent Attorney for Applicant
MADDERNS

AUSTRALIA

PATENTS ACT 1990

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said mirror support held to said base portion by a connector that allows

10 pivotally movement of said mirror support with respect to said base portion, and

~~a link extending between said mirror support and base portion with one end~~

of said link held with respect to either said mirror support or base portion with the other end locating in an aperture, there being a tight sliding fit between said aperture and link so that sufficient force applied to said mirror support will cause movement of said link in said aperture and allow movement of said mirror support with respect to said base and that said link will be held tightly enough in said aperture to prevent vibration or undesirable movement of said mirror support with respect to said base.

Preferably, the mirror will be fixed in a conventional manner to a mirror support.

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Preferably, the connector allows movement of the mirror support about two orthogonal axes. However, the invention will be equally suited to mono axis mirrors where the mirror support may be adjusted about one axis only such as a vertical axis.

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The connector may comprises a variety of mounts which allow movement of the mirror support about the adjustment axes. The connector means may include a ball

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~~The length of the friction blades 17 are sufficient to cover the full range of movement of the mirror support 11.~~

15 The compression spring 25 provides a convenient means for adjusting the gripping force applied to the friction blades 17. The compression spring can be matched to provide the required gripping force which will prevent undesirable movement while at the same time still enabling manual movement of the mirror support 11.

20 The invention provides a means which is component and easy to manufacture while not requiring close tolerances to ensure proper function of the mounting assembly 10.

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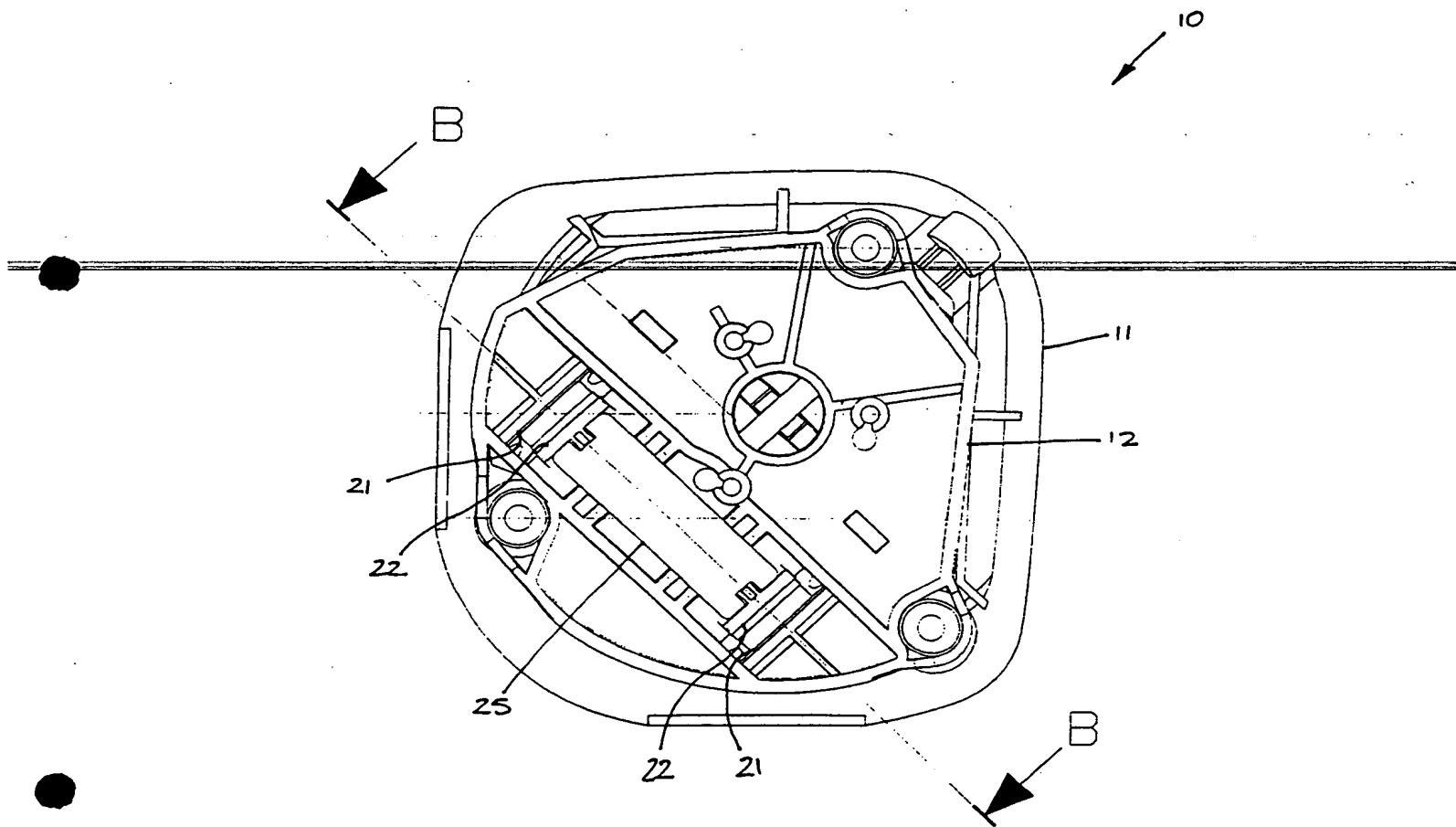


Fig 2

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